

We claim:

1. A path and/or position measuring device comprising a magnet (2) and a sensor (3) detecting the magnetic field intensity, the magnet (2) and/or the sensor (3) co-operating with a movable element (4), the magnet (2) being formed in such a way that the magnetic field intensity varies along an axis (5) of the magnet (2), and it being possible for a relative movement between the sensor (3) and the magnet (2) substantially in the direction of this axis (5) of the magnet (2) to be brought about by means of the movable element (4) in such a way that the path and/or the position of the movable element (4) can be determined on the basis of the magnetic field intensity detected by the sensor (3), characterized in that the magnet (2) is fastened to the movable element (4).
2. The path and/or position measuring device as claimed in claim 1, characterized in that the sensor (3) generates an electrical output voltage in dependence on the magnetic field intensity, the output voltage preferably being substantially proportional to the sensed magnetic field intensity, in particular to the flux density associated with the respective magnetic field intensity.
3. The path and/or position measuring device as claimed in claim 1, characterized in that the sensor (3) is a Hall sensor, in particular of the analog type, GMR sensor or the like.
4. The path and/or position measuring device as claimed in claim 1, characterized in that the magnet (2) has a

ramp- or wedge-shaped form in the direction of the axis (5), in particular with a linear change in the height (8) of the magnet (2) in the direction of the axis (5), in such a way that the flux density variation for the magnetic field in the direction of the axis (5) is substantially linear, the air gap (9) between the magnet (2) and the sensor (3) preferably being substantially constant along the direction of the axis (5).

5. The path and/or position measuring device as claimed in claim 1, characterized in that the magnet (2) consists of polymer-bonded magnetic particles, the magnet (2) being produced in particular by injection molding.
6. The path and/or position measuring device as claimed in claim 1, characterized in that the magnet (2) is fastened to the movable element (4) with a latching engagement, fitted into the movable element (4), integrated into the movable element (4) or the like, in particular in that the polymer-bonded magnet (2) is molded into the movable element (4) in the manner of a two-component part.
7. The path and/or position measuring device as claimed in claim 1, characterized in that the movable element comprises a push rod (4), in that the push rod (4) is preferably mounted in a linearly movable manner in a housing (11), and in that, with further preference, the magnet (2) is fastened to the push rod (4) in such a way that the axis (5) of the magnet (2) is aligned approximately parallel to the longitudinal axis (12) of the push rod (4).

8. The path and/or position measuring device as claimed in claim 1, characterized in that the sensor (3), which is designed in particular in the manner of an integrated circuit, is arranged on a printed circuit board (13), in that electronics for the evaluation of the sensor signal are preferably provided on the printed circuit board (13), in that, with further preference, a securing means (14) for fastening the printed circuit board (13) is arranged in the housing (11), and in that, with still further preference, a plug-in receptacle (15) for a connector (16) for the electrical connection to the printed circuit board (13) is arranged on the housing (11), in particular on the securing means (14).
9. The path and/or position measuring device as claimed in claim 1, characterized in that the push rod (4) is articulated on a movable part by means of a ball joint (17) and, if appropriate, a fastening plate (21), and in that the housing (11) is preferably arranged on a fixed part by means of a ball joint (18) and, if appropriate, a fastening plate (22).